

REMARKS

This is in response to the Office Action mailed June 15, 2004, in which claims 13-18, 20-24, and 27-30 were rejected and claims 19, 25, 26, and 31 were objected to. With this amendment, claims 13-14, 16-25, 27-28, and 30-31 are amended, and new claims 32-33 are added, such that the claims pending for examination are claims 13-33. Claims 1-12 were canceled in the previous Amendment.

Claim Rejection - 35 U.S.C. 102(b)

Claims 13-17, 20-24, and 27-30 were rejected under 35 U.S.C. 102(b) as anticipated by Cheprasov et al. Though the Office Action states that Cheprasov et al. discloses an apparatus for lapping a row of sliders comprising all of the subject matter set forth in the claims, such is not the case.

The claims have been amended to clarify that the invention relates to a material removal device for lapping a bar of sliders which uses direct head electrical response signals for feedback process control, rather than indirect feedback regarding stripe height received from an ELG. More specifically, claim 13 has been amended to clarify that the material removal device comprises means for sensing an electrical response of each magneto resistive (MR) element on each slider on the bar, and means for controlling the material removal device based on the sensed electrical responses to achieve a target height for each MR element on each slider on the bar.

Similarly, claim 20 has been amended to clarify that the material removal device comprises a sensor associated with each slider, the sensor configured to sense an electrical response of an MR element to a magnetic field. Claim 20 also clarifies that the control system of the material removal device controls a plurality of control drivers associated with each slider based on input received from the sensors. Claim 27 clarifies that the material removal device comprises a control system having a magnetic field source, sensors on each slider for sensing an electrical response to a magnetic field applied by the magnetic field source, and control software for correlating the sensed electrical response to a target dimension for each slider.

Cheprasov et al. does not anticipate the present invention. Cheprasov is not related to a material removal device which uses direct head electrical response signals for feedback process control, rather than indirect feedback, as claimed by the present application. In direct contrast, Cheprasov discloses a load cells or other force measuring devices incorporated in the linkage coupling the actuator to the row tool, or fixture, which holds the bar of sliders. (Col. 8, ll. 62-65.) Cheprasov only briefly discuss sensors for obtaining feedback for process control, and when doing states any "readily available conventional control components" may be used. (*See* Col. 7, ll. 44-60.) Thus, the focus of Cheprasov is an improved row tool and manner of actuating the row tool, not use of direct head electrical response signals for feedback process control.

Claim 18 was rejected under 35 U.S.C. 103 as unpatentable over Cheprasov et al. Claim 18 is a dependent claim, depending from claims 16 and independent claim 13. As described above, independent claim 13 has been amended and is not anticipated by Cheprasov. Based on the amendments to claim 13, the obviousness rejection of dependent claim 18 based on Cheprasov is rendered moot.

Claim Objections and Allowable Subject Matter

The office action Summary indicated that claims 19, 25, 26, and 31 were objected to. Applicant gratefully acknowledges the voice mail message from Examiner Robert Rose left on August 11, 2004, clarifying that claims 19, 25, 26, and 31 were objected to as being dependant on a rejected base claim, but would be allowable if rewritten in independent form.

With this Amendment, new claims 31 and 32 are submitted. It is believed that new claims 31 and 32 are allowable as distinguishable over the prior art.

CONCLUSION

With the above amendments and discussion, the present application is now in condition for allowance. Notification to that effect is respectfully requested. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

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